

Toyota OBDII Trouble Codes

Data from various websites and FSM's.

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P0001-P0099 — Fuel / Air Metering & Auxiliary Emission Controls

P0001	Fuel Volume Regulator Control Circuit/Open
P0002	Fuel Volume Regulator Control Circuit Range/Performance
P0003	Fuel Volume Regulator Control Circuit Low
P0004	Fuel Volume Regulator Control Circuit High
P0005	Fuel Shutoff Valve "A" Control Circuit/Open
P0006	Fuel Shutoff Valve "A" Control Circuit Low
P0007	Fuel Shutoff Valve "A" Control Circuit High
P0008	Engine Positions System Performance Bank 1
P0009	Engine Position System Performance Bank 2
P0010	"A" Camshaft Position Actuator Circuit (Bank 1)
P0011	"A" Camshaft Position - Timing Over-Advanced or System Performance (Bank 1)
P0012	"A" Camshaft Position - Timing Over-Retarded (Bank 1)
P0013	"B" Camshaft Position - Actuator Circuit (Bank 1)
P0014	"B" Camshaft Position - Timing Over-Advanced or System Performance (Bank 1)
P0015	"B" Camshaft Position - Timing Over-Retarded (Bank 1)
P0016	Crankshaft Position - Camshaft Position Correlation (Bank 1 Sensor A)
P0017	Crankshaft Position - Camshaft Position Correlation (Bank 1 Sensor B)
P0018	Crankshaft Position - Camshaft Position Correlation (Bank 2 Sensor A)
P0019	Crankshaft Position - Camshaft Position Correlation (Bank 2 Sensor B)
P0020	"A" Camshaft Position Actuator Circuit (Bank 2)
P0021	"A" Camshaft Position - Timing Over-Advanced or System Performance (Bank 2)
P0022	"A" Camshaft Position - Timing Over-Retarded (Bank 2)
P0023	"B" Camshaft Position - Actuator Circuit (Bank 2) - See Trouble Code P0020
P0024	"B" Camshaft Position - Timing Over-Advanced or System Performance (Bank 2)
P0025	"B" Camshaft Position - Timing Over-Retarded (Bank 2)
P0026	Intake Valve Control Solenoid Circuit Range/Performance Bank 1
P0027	Exhaust Valve Control solenoid Circuit Range/Performance Bank 1

P0082	Intake Valve Control Solenoid Circuit
P0083	Intake Valve Control Solenoid Circuit
P0084	Exhaust Valve Control Solenoid Circuit
P0085	Exhaust Valve Control Solenoid Circuit
P0086	Exhaust Valve Control Solenoid Circuit
P0087	Fuel Rail/System Pressure - Too Low
P0088	Fuel Rail/System Pressure - Too High
P0089	Fuel Pressure Regulator 1 Performance
P0090	Fuel Pressure Regulator 1 Control Circuit
P0091	Fuel Pressure Regulator 1 Control Circuit
P0092	Fuel Pressure Regulator 1 Control Circuit
P0093	Fuel System Leak Detected - Large Leak
P0094	Fuel System Leak Detected - Small Leak
P0095	Intake Air Temperature Sensor 2 Circuit
P0096	Intake Air Temperature Sensor 2 Circuit
P0097	Intake Air Temperature Sensor 2 Circuit
P0098	Intake Air Temperature Sensor 2 Circuit
P0099	Intake Air Temperature Sensor 2 Circuit

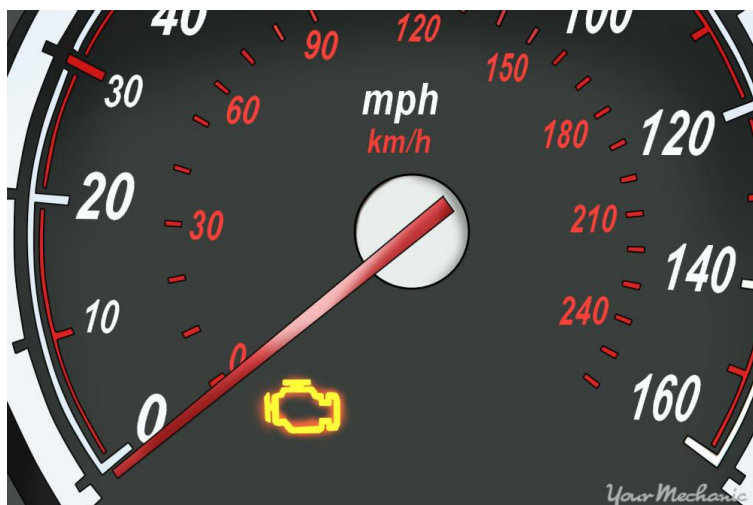
P0100-P0199 — Fuel and Air Induction

P0100	Mass or Volume Air Flow Circuit Malfunction
P0101	Mass or Volume Air Flow Circuit Range/Performance
P0102	Mass or Volume Air Flow Circuit Low
P0103	Mass or Volume Air Flow Circuit High
P0104	Mass or Volume Air Flow Circuit Intermittent
P0105	Manifold Absolute Pressure/Barometric Pressure Correlation
P0106	Manifold Absolute Pressure/Barometric Pressure
P0107	Manifold Absolute Pressure/Barometric Pressure
P0108	Manifold Absolute Pressure/Barometric Pressure
P0109	Manifold Absolute Pressure/Barometric Pressure
P0110	Intake Air Temperature Circuit Malfunction

Diagnostic Trouble Code (DTC) Descriptions

P0133 - HO2S Sensor Circuit Slow Response (HO2S-11)	The HEGO Monitor checks the HO2S Sensor frequency and amplitude. If during testing the frequency and amplitude were to fall below a calibrated limit, the test will fail.	<ul style="list-style-type: none"> ● Contaminated HO2S sensor. ● Exhaust leaks. ● Shorted /open wiring. ● Improper fueling. ● MAF sensor. ● Deteriorating HO2S sensor. ● Inlet air leaks. 	Access HO2S test results from the Generic OBD-II menu to verify DTC.
P0135 - HO2S Sensor Circuit Malfunction (HO2S-11)	During testing the HO2S Heaters are checked for opens/shorts and excessive current draw. The test fails when current draw exceeds a calibrated limit and/or an open or short is detected.	<ul style="list-style-type: none"> ● Short to VPWR in harness or HO2S. ● Water in harness connector. ● Open VPWR circuit. ● Open GND circuit. ● Low battery voltage. ● Corrosion or poor mating terminals and wiring ● Damaged HO2S heater. ● Damaged PCM. 	<ul style="list-style-type: none"> ■ wiring. ■ Damaged HO2S heater. ■ Damaged PCM.
P0136 - HO2S Sensor Circuit Malfunction (HO2S-12)	The downstream HO2S sensor(s) are continuously checked for maximum and minimum voltages. The test fails when the voltages fail to meet the calibrated limits.	<ul style="list-style-type: none"> ● Pinched, shorted, and corroded wiring and pins. ● Crossed sensor wires. ● Exhaust leaks. ● Contaminated or damaged sensor. 	
P0141 - HO2S Sensor Circuit Malfunction (HO2S-125)	See DTC P0135		
P0151 - HO2S Sensor Circuit Out of Range Low Voltage (HO2S-21)	See DTC P0131		
P0153 - HO2S Sensor Circuit Slow Response (HO2S-21)	See DTC P0133.		

DTC	Description	Possible Causes	Diagnostic Aides



DIAGNOSTIC TROUBLE CODES EXAMPLE

SYSTEMS
B = Body C = Chassis P = Powertrain U = Network

TYPE OF CODE
0 = Standardised (SAE) fault codes 1 = Manufacturer specific codes

DEFINE THE EXACT FAULT CODE IN QUESTION
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P 0 2 0 2

WHICH OF THE CAR SYSTEMS IS AT FAULT	
1 = Fuel and Air Metering	5 = Vehicle Speed Control and Idle Control
2 = Fuel and Air Metering	6 = Computer Output Circuits
3 = Ignition System or Engine Misfire	7 = Transmission Controls
4 = Auxiliary Emission Controls	8 = Transmission Controls

OBD2 FAULT CODE

P 0 0 1 0

Symptoms and Solutions



Diagnostic Trouble Code (DTC) Descriptions

DTC	Description	Possible Causes	Diagnostic Aides
P0102 - Mass Air Flow (MAF) Circuit Low Input	The MAF sensor circuit is monitored by the PCM for low air flow (or voltage) input through the comprehensive component monitor (CCM). If during key ON engine running the air flow (or voltage) changes below a minimum calibrated limit, the test fails.	<ul style="list-style-type: none"> MAF sensor disconnected MAF circuit open to PCM VPWR open to MAF sensor PWR GND open to MAF sensor MAF RTN circuit open to PCM MAF circuit shorted to GND Intake air leak (near MAF sensor) A closed [throttle indication throttle position (TP) sensor system] Damaged MAF sensor Damaged PCM 	A MAF V PID (MAF PID) reading less than 0.23 volts (Refer to equivalent grams/second chart in Pinpoint Test DC) in continuous memory or key ON and engine running indicates a hard fault.
P0103 - Mass Air Flow (MAF) Circuit High Input	The MAF sensor circuit is monitored by the PCM for high air flow (or voltage) input through the comprehensive component monitor (CCM). If during key ON engine OFF or key ON engine running the air flow (or voltage) changes above a maximum calibrated limit, the test fails.	<ul style="list-style-type: none"> MAF sensor screen is blocked MAF circuit shorted to VPWR Damaged MAF sensor Damaged PCM 	A MAF V PID (MAF PID) reading less than 4.6 volts (Refer to equivalent grams/second chart in Pinpoint Test DC) in continuous memory or key ON and engine running indicates a hard fault.
P0106 - Barometric (BARO) Pressure Sensor Circuit Performance	Baro sensor input to the PCM is monitored and is not within the calibrated value.	<ul style="list-style-type: none"> Slow responding BARO sensor Electrical circuit failure Damaged BARO sensor Damaged PCM 	<ul style="list-style-type: none"> VREF voltage should be between 4.0 and 6.0 volts PID reading is in frequency